

BRIEF COMMUNICATION

A GIANT DEEP-SEA SQUID, *TANINGIA* SP., FROM SOUTH AUSTRALIAN WATERS

In April 1980 fishermen from Port Lincoln reported the capture of a giant squid bearing hooks instead of suckers on the arms. The specimen, estimated to be 2 m long x 1.5 m wide, was floating on the surface 120 km offshore, south of Port Lincoln. Unfortunately the boat from which the discovery was made did not have facilities to keep the specimen whole, and so it was cut up and subsequently sold for bait. However, two arms and the beaks were recovered, thus permitting generic identification.

Dismay at the destruction of such a scientifically valuable specimen prompted fishermen to look out for more and, in early May, 1980 two were recovered from the same general area. One of these had the head and arms missing, but still weighed 95 kg and had a dorsal mantle length of 158 cm. The other specimen weighed in excess of 110 kg and measured 2.1 m total length. It was in almost perfect condition and is currently frozen awaiting a more detailed examination.

Preliminary investigations have shown that the specimens represent the genus *Taningia* (Family: Octopoteuthidae), but as they have not been examined in detail a specific determination could not be made. However, they are most likely *T. danae* Joubin, 1931, as the genus is monotypic and the material at hand does not seem to vary markedly from published descriptions¹⁻².

There are a number of distinctive features which characterize this species. The arms are relatively short, about $\frac{1}{4}$ of the mantle length and are armed with a series of hooks instead of suckers. The second arms each bear a large light organ at their tip which was bright yellow in the present specimens and measured about 5 x 3 cm. The tentacles, which account for most of the length in the true giant squids, *Architeuthis*, are absent in mature specimens and vestigial in juveniles of *Taningia*. The fins extend for most of the mantle and are

very large, making the body of the animal almost as broad as the mantle length. The mantle wall and fin are extremely thick and gelatinous and the body is relatively more bulky than any other species of squid.

Nearly all of the known specimens of *Taningia* have been collected from sperm whale stomachs, and it is unusual to encounter them floating on the surface. It is possible that they were regurgitated by sperm whales, and this may be the case for the specimen lacking a head, but the other two were found in relatively good condition and the fishermen estimated that they had died only very recently. According to the Port Lincoln fishermen dead squid often come to the surface near the edge of the continental shelf, but they are quickly eaten by seabirds and it is difficult to find a complete specimen. *T. danae* forms an important part of the diet of sperm whales and by weight is the most significant part of sperm whale diets³. Clarke⁴ recorded beaks and portions of flesh of this species from the stomachs of sperm whales caught near Albany, W.A., but this is the first definite record of *Taningia* from Australian waters. The previously known distribution of *Taningia*, mainly from sperm whale stomachs, includes the Azores, Madeira, the equatorial Atlantic and the eastern coast of South Africa⁵.

I intend to publish the results of a more detailed examination of the specimens in the near future.

My sincere thanks to Dinko Lukin and the crew of the "Katina G" and to Juergen Zenke and the crew of the "Rosalind Star" for collecting and donating the specimens to the South Australian Museum. My thanks also go to S.A.F.C.O.L. who transported the specimens to Adelaide free of charge. A special thanks is due to Neville Wanklyn of the "Port Lincoln Times" who alerted the fishermen to the importance of the specimens, and to his Editor for being so understanding.

¹Joubin, L. (1931). *Annls Inst. oceanogr.*, Monaco 10, 169-211.

²Clarke, M. R. (1967) *Symp. zool. Soc. Lond.* (19), 127-43.

³Clarke, R. (1956). *Discovery Rep.* 28, 237-98.

⁴Clarke, M. R. (1980). *Ibid.* 37, 1-24.

WOLFGANG ZIEGLER, South Australian Museum, North Terrace, Adelaide, S. Aust. 5000.

ADDENDUM

BUTLER & KEOUGH—*Trans. R. Soc. S. Aust.* 105(1), 29-39.

The authors apologise for the omission from the manuscript of Acknowledgements. We intended to include the following:

We are indebted to Tony Oliver and Deirdre Coombe for assistance in the field. The work was supported by a grant from the University of Adelaide Research & Publications Committee and by ARGC Grant D17815083.